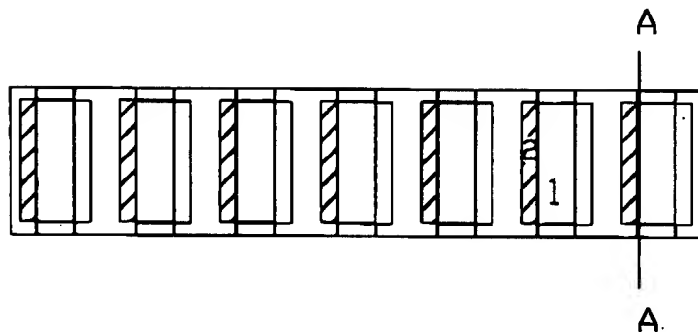
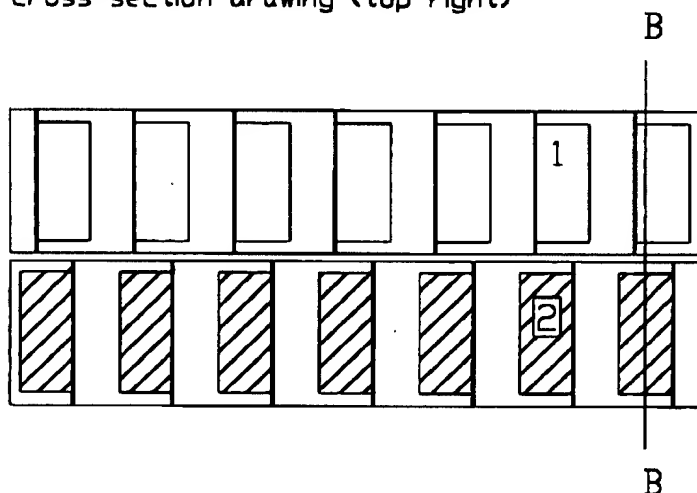


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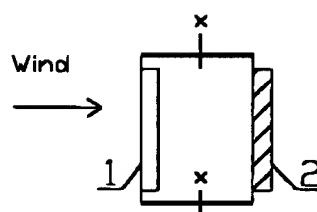
Schematic presentation of the Diggs Apparatus with seven sails facing the wind (1) and seven sails (2) "behind" on the return path of the "oval", partially hidden by sails (1).

Line A-A passes through the center of the sprockets (shown in thick lines on the cross-section drawing (top right))



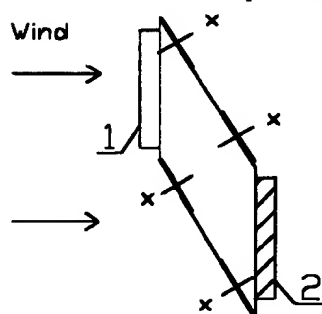
Schematic presentation of our Apparatus with seven sails whose "front" surface faces the wind and seven sails whose "rear" surface ALSO faces the wind without any obstruction

Line B-B passes through the center of the sprockets shown in thick lines on the cross-section drawing (above right)



Drawing at left represents a cross-sectional view of Diggs apparatus along Line A-A

The Apparatus According to Diggs may be represented on a two dimensional plane as indicated at top left: The front surface of seven sails (1) are in white while the rear surface of another seven sails is hatched (2) and partially hidden. Sails (1) move to the left; wind impinges vertically onto surface of sheet (rear sails (2) move to the right) Surface of apparatus facing the wind is as shown by outer rectangle.



Drawing at left represents a cross-sectional view along Line B-B  
Lines x represent the axes of the four sprocket wheels (thick lines).

In our apparatus an equal number of sails as in the Diggs example (ie. 14) present twice as large surface facing the wind and the front surface (in white (1)) of the seven sails (top section) does not obstruct the rear surface of the remaining sails (drawn hatched (2)) allowing the full force of the wind impinging perpendicularly onto the sheet. Thus our apparatus has twice the efficiency of the Diggs unit (everything else being the same). In our apparatus the sails (1) (in white) move to the left while the hatched sails (2) on the return path move to the right as they receive the full force of the wind (unobstructed).